

## BIBLIOGRAPHICAL NOTICES.

*Natural History of New York. Zoology, or the New-York Fauna, comprising detailed descriptions of all the Animals hitherto observed within the state of New York, with brief notices of those occasionally found near its borders, and accompanied by appropriate illustrations.* By James E. De Kay. Part I. Mammalia. 4to. Albany, 1842.

THE appearance of the advertisement of a zoological work in America extending to ten quarto volumes, devoted to the natural productions of a particular province, induced us, in these days of cheap publications, to procure a sight of the first part of the undertaking. It is the result of one of those State-Surveys, several of which have been previously completed by other districts, and it tells much for the enterprise of the country that an examination on such a scale should have been undertaken, and still more so that the results should be so early commenced to be laid before the public, thereby repaying to the state value for the employment it had given to its scientific men; and it might stand as an example to the governments of older countries, not to store up the results of the expensive labours of years for the unlikely probability of rendering them perfect after the generation of their projectors shall have ceased to exist: "go ahead" may sometimes be taken as a useful motto.

By authority of acts of the Assembly the above-mentioned Survey was made: "William L. Marcy, governor, arranged the plan of the Survey in the summer of 1836, and assigned its departments as follows: the Zoological department to James E. De Kay; the Botanical department to John Torrey; the Mineralogical and Chemical departments to Lewis C. Beck; the Geological department to William W. Mather, Ebenezer Emmons, Timothy A. Conrad, and Lardner Vanuxem. This arrangement was subsequently altered by the institution of a Palæontological department, under the care of Mr. Conrad, and by the appointment of James Hall to supply his place as a geologist. The results of the Survey appear in the following volumes, and in eight several collections of specimens of the animals, plants, soils, minerals, rocks and fossils found within the state, one of which collections constitutes a museum of natural history at the capital of the state, and the others are distributed among its collegiate institutions." The volume before us, being the first of the series, is prefaced by an introduction of 188 pages, which will prove interesting to the general reader; it gives a rapid sketch of the present condition of the arts and sciences, of the progress of agriculture, internal navigation, railroads, horticulture, newspaper-press, history of the antiquities, and of the Aborigines; in fact, touching on almost every topic.

The real commencement of the book, or of the Zoological part, has a short preface devoted to the description of the surface and boundary of the state, with a tabular view of the mammalia indige-

nous to it, comprised in forty-five genera, including fossil as well as recent and introduced animals. New York lies wholly within the temperate zone, and contains more than 46,000 square miles. Although situate within the same parallels of latitude which include the greater part of Italy, the south of France, and the northern parts of Spain, yet, from the well-established facts of the more southerly position of the isothermal lines on the western shores of the Atlantic, its mean annual temperature cannot be compared with that of the above-mentioned countries, but rather with those lying from  $15^{\circ}$  to  $20^{\circ}$  farther north. The result of ten years' observations at New York gives 165 days, or about five months, as the mean duration of winter. Few mountains in the state exceed 5000 feet, yet, from the peculiarity of climate, their summits have a temperature much lower than mountains of even higher altitude in corresponding parallels in Europe. The great inland seas, Erie and Ontario, have also their influence on the climate and the productions, while the long gut of land known by the name of Long Island, reaching to the Atlantic, is the extreme southern limit of the migrations of the arctic species, and the most northern termination of the wanderings of the birds of the torrid zone.

Through the Zoological part the descriptions appear to be carefully made out. The synonyms are chiefly taken from works relating to the fauna of North America, a more extended list, perhaps, being not called for in a work of comparatively provincial character; but the remarks on the habits of the animals, or their æconomical and commercial utility, are extremely limited; these in one view may not be considered *strictly* scientific, at the same time they are very important. In the description of the beaver it is stated, that in the state of New York this animal is now nearly extirpated, while in little more than 200 years previously (1635), 14,891 skins were exported; such is the passing away of many of formerly abundant species. The New York and European beavers are considered identical.

Among several of the North American animals which have been considered specifically the same with those of Europe by various authors, it is to be regretted that any doubt should still exist in a matter so interesting in their geographical distribution, especially when the communication between the two continents has become so speedy and regular. The *Mustela vulgaris*, Rich. Faun. Bor. Am., there considered identical with that of Europe, is given as *M. pusilla*; but of the ermine, *M. Erminea*, auct., though given under the specific designation of "Noveboracensis," there still seems to exist a doubt. The sable is given as *M. Martes* and European synonyms quoted; and the observation (with which we feel inclined to agree) is made—"I am inclined to believe that the American sable is very distinct from the pine marten of Europe, with which it is usually arranged," and to which is added, "I have no means of making the direct comparison." The *American black rat*, *Mus Americanus*, is given as a new species different from the *M. Rattus* introduced, varying from it in its dentition, relative length of ears and tail; it is very rare, only one specimen having been obtained. The new

genus OTISOREX is proposed, differing from *Sorex* in the large and prominent ears; it rests on two small species, one northern, another southern. The characters given are—"Ears large, prominent, beyond the fur; nose elongated; eyes distinct; tail quadrangular; teeth 33\*."

A short list of the extra-limital species is given at the end of each genus.

The volume is illustrated with thirty-three engraved and lithographed plates, but they in general do not equal the beautiful title-page and the style of the other parts of the work. The engraving workmanship is finely executed, of which the first two plates, the lower figure on plate 6, and plate 16, are good examples; but the drawing of all the large animals particularly, and many of the others, is bad and stiff. Plates 13 and 18, the latter a lithograph, should not have been admitted. Notwithstanding these criticisms, we wish well to this undertaking, and trust that some of our societies, or public libraries, will import the work, its price excluding it from the reach of many of our private zoologists.

*Icones Plantarum.* By Sir W. J. Hooker, K.H., &c. Part IX. Baillière, London, 1843.

We rejoice to find, by the appearance of this, the first part of the sixth volume, that Sir W. J. Hooker is determined to continue so peculiarly valuable a work as that before us. It must be quite unnecessary for us to enter upon its praises, as no botanist can now require any further observation than to be informed of its appearance. We will only say that Sir W. Hooker deserves the gratitude of all botanical students for having boldly commenced it in so cheap, and although cheap, so excellent a form, and at the same time so complete in its execution. This part contains, if possible, even a larger proportion than its predecessors of new and highly interesting plants.

*Flora Italica.* By A. Bertoloni, Eq. Aur., M.D. Bononiæ, 1842.

The first part of the fifth volume of this justly celebrated work has reached us. As we have referred to it on previous occasions, we wish only to record the commencement of another volume for the benefit of our botanical readers. It contains the order *Dodecandria* and a part of that of *Icosandria* (including in the former the genus *Euphorbia*), and fully supports the high character acquired by its predecessors.

#### BOOKS RECEIVED.

*Transactions of the Berwickshire Naturalist's Club.* Vol. ii. Part 1. 8vo. 1842. Privately printed by the Club.

This commences the second volume of the Club's Transactions, and contains an excellent address by the late President, Mr. Darling, detailing the acts, &c. of the past year, together with one or two papers of local interest; among them a short notice of the discovery of *Smilacina bifolia* in the woods at Howick and Kenwood.

\* *Delphinus phocæna*, *orca*, and *Delphis* are considered specifically identical in the North American and British seas.

*Illustrations of the Zoology of South Africa.* By Dr. Andrew Smith. Parts 16 & 17. 4to. Smith, Elder and Co., 1843.

The ornithological part of these numbers is devoted to the genus *Drymoica*, of which fifteen species are described and figured, only two being considered identical with the birds represented by Le Vaillant. We have also a very interesting series of figures of a species of *Naia*, exhibiting its variations and its young state, some of which are so very dissimilar that we cannot wonder at their being kept distinct by persons who have only seen specimens in spirits. We consider the illustrative department improved, and some of the figures very well finished.

#### PREPARING FOR PUBLICATION.

Mr. Gray and Dr. Richardson are preparing a work on the fishes of China, to be illustrated with figures taken from the living specimens. It will appear in quarterly parts, in small folio.

A new Dictionary of Natural History has been undertaken in Paris under the auspices of M. Ch. D'Orbigny, entitled "*Dictionnaire universel d'Histoire Naturelle.*" The new articles, not in any of the previous dictionaries, are said to be not less than 20,000. The etymology of scientific terms is to be given. There will be an atlas of plates, and the whole will be preceded by an introduction containing a detailed plan of the work, with the ancient history of the sciences.

Mr. J. C. Bellamy, Author of "*Natural History of South Devon,*" has announced a work entitled, *The Housekeeper's Guide to the Fish-Market for each Month of the year; and an account of the Fishes and Fisheries of Devon and Cornwall, in respect of Commerce, Economy, Natural History, and Statistics.*

#### *Hodgson's Zoology of Nipal: Mammalia.*

The prospectus is as follows:—"Mr. Brian Houghton Hodgson, who has for some years past resided in an advantageous situation for the collection and study of the various quadrupeds and birds of the hills, proposes to publish by subscription a work, calculated alike to satisfy the scientific and the sporting communities.

"The drawings are admirably faithful, and comprise some 850 birds, and 132 species and varieties of quadrupeds and their allies. The text will furnish all procurable information as to the habits and instincts of the subjects portrayed by the pencil; and the author will have the assistance of able co-operation in England\*, where the work will be got up in the best style, under the superintendence of Mr. Frank Howard, who has produced Capt. W. C. Harris's '*Portraits of African Animals.*'

"The first division of this work will contain 100 lithographic plates, printed on super royal, folio, carefully coloured from the original drawings, to appear in parts, each containing twenty plates, every

\* As it has been mentioned in the Indian Journals that Sir W. Jardine would superintend the publication of Mr. Hodgson's work, it may be proper to state here that there is no foundation for such a report.—ED.

alternate month, which, together with an 8vo volume of letter-press, will form a complete illustration of the Mammalia of Nipal."

Mr. James Hamilton Fennell, author of a very entertaining and instructive History of Quadrapeds, is preparing to publish by subscription a volume on "Shakespeare's Knowledge of the Works and Phænomena of Nature." From among the authorities given in the Prospectus in favour of such a work, we select the following:—

"All the images of nature were ever present to Shakespeare, and he drew them not laboriously, but luckily."—*Dryden*.

"Whatever object of nature, or branch of science, he either speaks of or describes, it is always with competent, if not extensive knowledge; his descriptions are still exact; all his metaphors appropriate, and remarkably drawn from the true nature and inherent qualities of each subject."—*Pope, in the Preface to his edition of Shakespeare's Works, 1725 and 1728*.

"Mr. Fennell's subject is a delightful one, and when finished in the manner that portion of it is treated which I have seen, cannot fail to make a very popular volume. It is an appendix to the text which many readers of Shakespeare must have felt the want of."—*William Yarrell, Esq. in a Letter to a Friend, dated Jan. 29, 1838*.

## PROCEEDINGS OF LEARNED SOCIETIES.

### ZOOLOGICAL SOCIETY.

February 22, 1842.—William Horton Lloyd, Esq., in the Chair.

The reading of the Second Part\* of Prof. Owen's Monograph on the *Apteryx australis*, Shaw, including its Myology, was completed.

The following is the descriptive portion of this communication:—

#### MUSCLES OF THE SKIN.

No detailed description of the muscles of the skin in Birds has been given either in the systematic works on comparative anatomy, or in particular treatises; these muscles appear indeed in general to be too irregularly or too feebly developed to have attracted much attention; brief notices are recorded of some peculiarly developed cutaneous muscles, as those which spread the plumes of the peacock, and erect the hackles of the cock; the compressors of the subcutaneous air-cells are noticed in the anatomical account of the Gannett (*Sula Bassana*†), and a more constant cutaneous muscle, viz. that which supports the crop in gallinaceous birds, is briefly mentioned and figured by Hunter ‡.

In the *Apteryx*, the subject of the present Myography, the cutaneous system of muscles presents a more distinct and extensive

\* See Transactions of the Zoological Society, vol. ii. part 4. p. 257, Splanchnology and Osteology.

† Proceedings of Zoological Society, 1832, p. 91.

‡ In description of pl. 10, vol. i. of Physiolog. Catalogue of Hunterian Collection, by Owen, 4to. 1833-1841.